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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,369	06/06/2002	James H. Crowell	CJL 301A2	2183

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EXAMINER
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SAFAVI, MICHAEL

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/009,369

Applicant(s)

CROWELL, JAMES H.

Examiner

M. Safavi

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### ***Drawings***

The instant application appears to contain drawing sheets with sheet numbering of 1-152. It is not clear as to what the drawing sheets 1-152, or figures presented on the drawing sheets 1-152, represent. There appears no description, brief or specific, of any of the figures on drawing sheet 1-152. And the figures themselves do not appear to contain Drawing Figure designations nor do they appear to contain reference characters depicting any elements of the invention. Clarification is required.

Applicant's remarks with respect to the drawings have been reviewed. However, when the application contains drawings, there shall be a brief description of the several views of the drawings and the detailed description of the invention shall refer to the different views by specifying the numbers of the figures and to the different parts by use of reference letters or numerals, (37 CFR 1.74). See M.P.E.P. 608.01(a) and M.P.E.P. 608.01(f) as well as 37 CFR 1.83(p), 37 CFR 1.83(t), and 37 CFR 1.83(u).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language of claims 1-26, and particularly independent claims 1-4, fails to clearly set forth the elements which go to make up the inventive concept of the instant

application. Further, no clear and complete relationship is ever set forth with respect to any and all elements which may be recited. There appears only language directed to desired effect or intended utilization or presumed consequence of any general aspects that are recited. There is no clear structure or article of manufacture set forth in the language of claims 1-26.

Applicant's remarks with respect to the above rejection under 35 USC 112, second paragraph has been reviewed but is not deemed persuasive. For example, what is being defined by "interconnect structures operatively associated with said building components"? No clear and complete relationship between "components", (or between "components and "interconnect structures"), is ever established. What, specifically, is being defined by "operatively associated with"? How, exactly, are the "components", (or "components and "interconnect structures"), put together? Or, are the "components" and/or "interconnect structures" ever connected? What, for example, is being defined by "operating adaptively, selectively and dynamically with respect to externally applied loads"? It is not clear as to what is being defined by "operating adaptively, selectively and dynamically". And with respect to any "externally applied loads", are any loads ever placed on the claimed modular building system? If so, what type of loads is the claimed building system experiencing? The metes and bounds of the language of claims 1-26 can, therefore, not be ascertained.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or  
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Boozer.

Boozer discloses, for example at Figs. 3, 2A, 4, 6, 7, 8, 10, and 15, a modular building system having interconnected structures operatively associated with, and interconnecting, respective building components, operable with the application of external load, and in direct response to the specific and instantaneous characteristics of such a load, to create a related, specific, load bearing path through the building between the point of the load application and the ground. Boozer, as well, discloses building components organized to form an overall building, at least some of which components are intended to carry loads that are related to different externally applied loads and interconnect structures operatively interconnecting said components, and capable of defining variably, and for different specific externally applied loads, which

ones of said components will form parts in a reaction, load-bearing path between the point of external load application and the ground, with the interconnected structures thus effectively holding to a minimum the overall time that certain ones of said components and interconnect structure operate as parts of such reaction path. Relative-motion-accommodating interconnect structures operating adaptively, selectively and dynamically with respect to external applied loads, and via the relative-motion accommodation, *rotationally and in at least two orthogonal directions*, accorded to selected interconnected building components and interconnect structures, to create different, responsive load-bearing paths through the building matrix between the point of such external load application and the ground are disclosed, as well. The elements of Boozer could be associated in any varying manner to create any varying design including connections affording relative motion, which may be a direct result of temperature, pressure, load, etc. Boozer does serve to accommodate limited rotational and translational motions between "components", (or "components and "interconnect structures"). See Fig. 3a as an example where accommodation of limited rotation can occur via V while accommodation of limited translation in at least two orthogonal directions can occur via 46s and 44s.

4. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Fulton et al. Fulton et al. discloses, including Figs. 1, 3, 4, 5, and 7, a modular building system having interconnected structures operatively associated with, and interconnecting, respective building components, operable with the application of external load, and in

direct response to the specific and instantaneous characteristics of such a load, to create a related, specific, load bearing path through the building between the point of the load application and the ground. Fulton et al., as well, discloses building components organized to form an overall building, at least some of which components are intended to carry loads that are related to different externally applied loads and interconnect structures operatively interconnecting said components, and capable of defining variably, and for different specific externally applied loads, which ones of said components will form parts in a reaction, load-bearing path between the point of external load application and the ground, with the interconnected structures thus effectively holding to a minimum the overall time that certain ones of said components and interconnect structure operate as parts of such reaction path. Relative-motion-accommodating interconnect structures operating adaptively, selectively and dynamically with respect to external applied loads, and via the relative-motion accommodation, *rotationally and in at least two orthogonal directions*, accorded to selected interconnected building components and interconnect structures, to create different, responsive load-bearing paths through the building matrix between the point of such external load application and the ground are disclosed, as well. The elements of Fulton et al. could be associated in any varying manner to create any varying design including connections affording relative motion, which may be a direct result of temperature, pressure, load, etc. Fulton et al. does serve to accommodate limited rotational and translational motions between "components", (or "components and "interconnect structures"). See Figs. 3 and 7 as an example where accommodation of

limited rotation can occur via 18 while accommodation of limited translation in at least two orthogonal directions can occur via 18 and movement of joint 20 in two directions, (joint 20 of Fulton et al. similar to that shown by joint of Fig. 18 of the instant application).

5. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Mangal. Mangal discloses a modular building system having interconnected structures operatively associated with, and interconnecting, respective building components, operable with the application of external load, and in direct response to the specific and instantaneous characteristics of such a load, to create a related, specific, load bearing path through the building between the point of the load application and the ground. Mangal, as well, discloses building components organized to form an overall building, at least some of which components are intended to carry loads that are related to different externally applied loads and interconnect structures operatively interconnecting said components, and capable of defining variably, and for different specific externally applied loads, which ones of said components will form parts in a reaction, load-bearing path between the point of external load application and the ground, with the interconnected structures thus effectively holding to a minimum the overall time that certain ones of said components and interconnect structure operate as parts of such reaction path. Relative-motion-accommodating interconnect structures operating adaptively, selectively and dynamically with respect to external applied loads, and via the relative-motion accommodation, *rotationally and in at least two orthogonal*

*directions*, accorded to selected interconnected building components and interconnect structures, to create different, responsive load-bearing paths through the building matrix between the point of such external load application and the ground are disclosed, as well. The elements of Mangal could be associated in any varying manner to create any varying design including connections affording relative motion, which may be a direct result of temperature, pressure, load, etc. Mangal does serve to accommodate limited rotational and translational motions between "components", (or "components and "interconnect structures"). See the drawing figure where accommodation of limited rotation can occur via 7' while accommodation of limited translation in at least two orthogonal directions can occur via movement of 7 within 6 in two directions.

6. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Newcomb et al. Newcomb et al. discloses, for example at Figs. 1, 3-5, and 7, a modular building system having interconnected structures operatively associated with, and interconnecting, respective building components, operable with the application of external load, and in direct response to the specific and instantaneous characteristics of such a load, to create a related, specific, load bearing path through the building between the point of the load application and the ground. Newcomb et al., as well, discloses building components organized to form an overall building, at least some of which components are intended to carry loads that are related to different externally applied loads and interconnect structures operatively interconnecting said components, and capable of defining variably, and for different specific externally applied loads,

which ones of said components will form parts in a reaction, load-bearing path between the point of external load application and the ground, with the interconnected structures thus effectively holding to a minimum the overall time that certain ones of said components and interconnect structure operate as parts of such reaction path. Relative-motion-accommodating interconnect structures operating adaptively, selectively and dynamically with respect to external applied loads, and via the relative-motion accommodation, *rotationally and in at least two orthogonal directions*, accorded to selected interconnected building components and interconnect structures, to create different, responsive load-bearing paths through the building matrix between the point of such external load application and the ground are disclosed, as well. The elements of Newcomb et al. could be associated in any varying manner to create any varying design including connections affording relative motion, which may be a direct result of temperature, pressure, load, etc. Newcomb et al. does serve to accommodate limited rotational and translational motions between "components", (or "components and "interconnect structures"). See col. 1, lines 37-56, as an example describing accommodation of limited rotation as well as accommodation of limited translation in at least two orthogonal directions.

### ***Response to Arguments***

Applicant's arguments filed December 22, 2003, with respect to Boozer, have been fully considered but they are not persuasive. As set forth in the above rejection involving


Boozer, Boozer does disclose limited relative motion between "components" and "interconnect structures" including rotationally and in at least two orthogonal directions.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Safavi whose telephone number is (703) 308-2168.

M. Safavi  
April 4, 2004



**MICHAEL SAFAVI  
PRIMARY EXAMINER  
ART UNIT 354**